

ERROR CORRECTION AND ENGLISH LANGUAGE TEACHING IN NON-NATIVE CONTEXT: A STUDY OF UNIVERSITY TEACHERS' APPROACH UNDER TOY THEORY IN PAKISTAN

*Iram Sharif , **Asia Iqbal, ***Muhammad Aqeel, ****Noman Ijaz

ABSTRACT

Teaching English in non-native context is a widely recognized field of research in which new approaches are introduced by researchers. Effective English Language Teaching is also a great challenge to create affective, cognitive and behavioral change in students in non-native contexts. English is used as foreign language In Pakistan, therefore it requires new approaches to teach the English language as EFL is almost taught in difficult circumstances. Error correction process plays a vital role in recognizing the linguistic approaches of teaching and learning. Effectiveness of the Error Correction process cannot be neglected as it modifies the learning and teaching process through identification of deficiencies. Teachers' role in error correction is vital as it can change the emotional, knowledge, understanding, and new material adoption behaviors in the students so that the learning process would be more effective. Toy's theory covers all these perspectives as it highlights the three different dynamics of error correction as affective, cognitive and behavioral changes. Present study is intended to manipulate the perception of English language teachers' approach to error correction by knowing their view through the survey questionnaire. The question is based on the three different dimensions of error correction as it will help to understand the strategies of teachers while making errors correct at the graduate level. The study is quantitative in approach based on the Likert scale, which consists of 10 different questions. Selected sample is 20 teachers teaching at graduate level in different institutes of Pakistan. The data is analyzed through SPSS (version 23) by finding mean and standard deviation to manipulate the significance of the problem.

Key Terms: Error Correction, ELT, Toy Theory

INTRODUCTION

English language is the core of development and progress in the field of technology, higher education and innovation. Due to the global need of the English language, it requires standardization in its use as well.

Writing is a tool for explaining the shapes and purposes of words, which allows for the creation of descriptive illustrations. Numerous expository factors have been studied, however the difficulty of writing still exists. The difficulty for the composition teacher is to come up with ways to both help the students improve their writing skills while attempting to get rid of some of their regular mistakes, and to also discover ways to meaningfully activate the passive knowledge they already have. When people are unable to verbally convey their feelings or thoughts, writing serves as a vital communication tool. It converts audible sounds into words that can be read and seen. Improving spelling as well as reading and writing abilities are necessary to increase literacy. However, many students find it difficult, especially English-language learners who are not native English speakers. The fact that these students view English as a foreign language and believe they lack proficiency in either its pronunciation or word spelling causes them to frequently be unable to spell English words or write sentences correctly (Hauser, 2013). Error correction is a phenomenon that enables language use to reach a high level of accuracy. It is beneficial to comprehend both the pragmatic and grammatical flaws in language usage. According to Amara (2015), error correction is viewed as a way to give language learners feedback on how they are using the language. No instructor can dispute the fact that one of the most challenging aspects of language learning is correcting students' mistakes whether they speak or write. Therefore, every language expert or educator should think about the following issues regarding error correction: the distinction between a mistake and an error, the amount of correction that should be made, the phases at which the teacher should correct the error, and how to correct the learner without demotivating him or her (Amara, 2015). Toy 's theory (n.d) is an approach which discusses learning as the changing of emotions, cognition and behavior. These aspects are further elaborated in terms of staying on mainstream, adoptions and corrections of the errors by own (as cited in Evan & Byrd, 2003). The aim of the study is to look into how graduate and post-graduate teachers approach error correction when using the Toy Theory. The purpose of the study is to understand the teachers' methodologies and perspectives on error correction at the graduate and postgraduate level.

*M Phil English (Applied Linguistics), Minhaj University Lahore. Fariadali123@gmail.com.

**PhD Scholar, Department of English Language and Literature, University of Sindh, Jamshoro Hyderabad Pakistan, uzairasia2@gmail.com.

***M Phil English Linguistics, Visiting Lecturer in Bahauddin Zakaria University Multan Punjab Pakistan,
aqeelpk786@yahoo.com.

**** M Phil in English, Abdul Wali Khan University Mardan. nomilinguist@gmail.com.

Statement of the Problem

Error correction is considered as the root of reformation and rearrangement of the learning outputs and gains of the students. It requires more and more concern from teachers to develop the standardized knowledge of students. English in non-native context demands high attention from the teachers to resolve the issues of foreign language learning. Studies have been conducted but the problems remained the same so it requires the modifications of methodologies and strategies of the teacher which could reinforce the students to gain the things and resolve the error corrections issues themselves.

Research Objectives

- To disclose the perceptions of teachers regarding error correction university level.
- To manipulate the thinking of teachers under Toy's theory to minimize the errors.
- To suggest the possible strategies and techniques under Toy Theory to minimize the English language errors issues.

Research Questions

- 1) What do the university teachers think of error correction phenomenon for foreign language teaching and learning?
- 2) How do teachers perceive the Toy's theory strategies to develop foreign language and minimize the language errors in students?

Significance of the Study

The study will enable us to understand the perception of university teachers regarding error correction phenomenon under Toy Theory. This unique study will also propose new ways of error correction in the sense of knowledge, understanding, mental and behavior changes in students studying in universities.

Literature Review

Shalan et al. (2010) studied on "An Approach for Analyzing and Correcting Spelling Errors for Non-native Arabic Learners". It was presented and assessed a proposed approach for detecting and correcting spelling errors in non-native Arabic language learners in this research. For the detection of spelling problems, Buckwalter's morphological analyzer. In addition to the rule-based transformation strategy, an edit distance algorithm was also used. The rules are based on our research into the most common spelling mistakes made by Arabic learners. The use of filtering techniques for spelling corrections, particularly gloss-related filters, resulted in a significant reduction in the number of proposed correction lists.

Amara (2015) conducted research on the topic of "Error Correction in Foreign Language Teaching". The research found that error correction and its importance in foreign language classrooms have gotten a lot of attention in recent decades. As a result, one way to emphasize the impact of mother tongues on students' English learning is to collect these errors and ask students to analyze and, if possible, correct them. Some errors must be dealt with, or they will become fossilized. EFL teachers should be aware of current developments in the field of error analysis and keep a close eye on related theories.

Raja et al. (2016) conducted a research study on "Error Treatment in Teaching English to EFL Adult Learners: A Study in Current English Language Teaching Practices in the Native/Non-Native Divide Context in Saudi Arabia". The goal of this study was to look into the practices of EFL teachers (both native and non-native) in teaching English to adult learners in Saudi Arabia. It was found through T-Test that there was no significant difference of grammatical errors of native and non-native language learners.

Altamimi et al. (2018) made a study on "A review of spelling errors in Arabic and non-Arabic contexts". The objective of this study was to determine the most common spelling mistakes in Arabic and non-Arabic contexts. According to existing data, one of the most difficult obstacles for Arab learners is English spelling and vocabulary, which leads to a high number of spelling errors and mistakes. Furthermore, the research reveals that spelling errors have a negative impact on pupils' writing abilities and written comprehension.

Kahlaoui (2018) did research on "Interlanguage Errors Awareness in English as a Foreign Language and Arabic as a First Language in a Saudi Context". The goal of this study was to see how aware L2 learners of English as a Foreign Language (EFL) and Arabic as a Second Language (ASL) are of errors they make at equivalent levels of proficiency in both languages for two groups of students. It was found that there is a greater understanding of the social function of language and the ongoing need for it in a second language setting. Learners of Arabic from other

languages in Saudi Arabia appear to benefit greatly from the Arabic speaking environment and to recognize the importance of being precise and correct in their language use in order to ensure communication.

Research Methodology

Present study is quantitative in approach and based on survey. A questionnaire tool is used as the survey, consisting of the 10 questions of different segments. The questionnaire is put before 20 English language teachers teaching at University level in District Multan. These teachers are taken as the sample of the study as well. Analysis is made through SPSS (Version 23), through which the frequencies and percentage of the responses are noted. Mean and standard deviation is also calculated to find out the significance of the responses.

The questionnaire consists of three domains, as Knowledge and Understanding, Behavioral Domain, and Affective Domains. There are four, three and three questions in every domain to note the view of the teachers regarding Error Correction under Toy Theory.

Data Analysis

Table No. 1 Data Analysis in Frequency and Percentile Form

No.	Statement of the Question		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
1	Do you think the teacher's motivation can help students to overcome errors more effectively?	Frequency	1	4	3	3	9	20
		Percent	5.00%	20.00%	15.00%	15.00%	45.00%	100.00%
2	Do you think the teacher's motivation can help students to analyze their errors by themselves?	Frequency	0	1	2	7	10	20
		Percent	0.00%	5.00%	10.00%	35.00%	50.00%	100.00%
3	Do you believe that students can learn more efficiently if their academic writing blunders are not displayed to other students?	Frequency	0	1	0	3	16	20
		Percent	0.00%	5.00%	0.00%	15.00%	80.00%	100.00%
4	Do you believe that immediately reporting faults can have a detrimental impact on a student's performance?	Frequency	1	2	0	7	10	20
		Percent	5.00%	10.00%	0.00%	35.00%	50.00%	100.00%
5	Do you believe that talks with professors can aid in the reduction of academic writing errors?	Frequency	0	2	3	5	10	20
		Percent	0.00%	10.00%	15.00%	25.00%	50.00%	100.00%
6	Do you think a teacher's knowledge is sufficient to rectify students' mistakes?	Frequency		1	4	5	10	20
		Percent	0.00%	5.00%	20.00%	25.00%	50.00%	100.00%
7	Do you agree that academic books are sufficient for error correction up to a certain point?	Frequency	0	3	2	5	10	20
		Percent	0.00%	15.00%	10.00%	25.00%	50.00%	100.00%
8	Do you believe that pupils' own efforts can aid in the correcting of errors?	Frequency	0	1	5	4	10	20
		Percent	0.00%	5.00%	25.00%	20.00%	50.00%	100.00%
9	Do you believe that errors can also be avoided by using sources of interest?	Frequency	0	2	2	5	11	20
		Percent	0.00%	10.00%	10.00%	25.00%	55.00%	100.00%
10	Do you agree that students' mistakes can be reduced by visiting libraries and studying sample projects?	Frequency	1	2	3	4	10	20
		Percent	5.00%	10.00%	15.00%	20.00%	50.00%	100.00%

Table No. 2 Teachers Teaching at Different Levels

No.	Statement of the Question	Total											
		Graduate			Post Graduate			Both; Graduate & Post Graduate			Total		
		Mean	S. D	S. E	Mean	S. D	S. E	Mean	S. D	S. E	Mean	S. D	S. E
1	Do you think the teacher's motivation can help students to overcome errors more effectively?	2.33	1.53	0.88	4.20	1.14	0.36	3.71	1.38	0.52	3.75	1.37	0.31
2	Do you think the teacher's motivation can help students to analyze their errors by themselves?	4.33	0.58	0.33	4.30	1.06	0.33	4.29	0.76	0.29	4.30	0.86	0.19
3	Do you believe that students can learn more efficiently if their academic writing blunders are not displayed to other students?	4.67	0.58	0.33	4.90	0.32	0.10	4.43	1.13	0.43	4.70	0.73	0.16
4	Do you believe that immediately reporting faults can have a detrimental impact on a student's performance?	4.33	0.58	0.33	3.90	1.37	0.43	4.43	1.13	0.43	4.15	1.18	0.26
5	Do you believe that talks with professors can aid in the reduction of academic writing errors?	4.67	0.58	0.33	3.90	1.10	0.35	4.29	1.11	0.42	4.15	1.04	0.23
6	Do you think a teacher's knowledge is sufficient to rectify students' mistakes?	4.67	0.58	0.33	4.00	0.94	0.30	4.29	1.11	0.42	4.20	0.95	0.21
7	Do you agree that academic books are sufficient for error correction up to a certain point?	4.00	1.00	0.58	4.20	1.03	0.33	4.00	1.41	0.53	4.10	1.12	0.25
8	Do you believe that pupils' own efforts can aid in the correcting of errors?	4.67	0.58	0.33	4.20	0.92	0.29	3.86	1.21	0.46	4.15	0.99	0.22
9	Do you believe that errors can also be avoided by using sources of interest?	4.67	0.58	0.33	4.10	1.10	0.35	4.29	1.11	0.42	4.25	1.02	0.23
10	Do you agree that students' mistakes can be reduced by visiting libraries and studying sample projects?	4.00	1.00	0.58	4.10	1.37	0.43	3.86	1.35	0.51	4.00	1.26	0.28

Question No. 1
Do you think the teacher's motivation can help students to overcome errors more effectively?
Analysis

This questionnaire is basically about the error correction of graduate and post graduate students. The questions were asked from male and female teachers who are teaching at graduate and post graduate level in different institutions. Question 1 was asked from teachers, which is about the motivation of teachers to help the students to overcome their errors more effectively. It has been shown in table No.1 that 45 percent of the teachers

strongly agree, and 15% of the teachers agree with the question to motivate their students in overcoming the errors in an effective way. It also has been observed that 5 percent of the teachers strongly disagree and 20% disagree with the question to motivate the students to overcome the errors. Only 15 percent of the teachers didn't give their response, they remained neutral in your approach to answer this question. In table No.2 it has been seen that the mean value is 2.33 for graduate level which is significant, whereas, at postgraduate level, the mean value is 4.20 which is more significant than the graduate level. The S.D value for graduate level is 1.53, and 1.14 for post graduate level. At postgraduate level, teachers believe that a teacher's motivation can help the students in a better and more effective way to overcome the errors of young learners.

Question No. 2 Do you think the teacher's motivation can help students to analyze their errors by themselves?
Analysis

The researcher also asked about the motivation of the students for students to analyze and correct their errors themselves. Teachers gave their different points of view regarding this particular question for this study. 50% of the teachers strongly agree, 35% of the teachers agree with the question of motivation for students to analyze their mistakes and errors themselves. 0.00 % teachers strongly disagree, and 5.0 % of the teachers disagree with the question of motivation for students to correct and analyze their errors themselves. But there are 10 percent of the teachers who are neutral in their perception and approach for this particular question. In Table No.2, it can be seen that the mean value is 4.33 for graduate level which is more significant for this, whereas, at postgraduate level, the mean value is 4.30 which is also more significant for this level. The S.D value for graduate level is 0.58, and 1.06 for post graduate level. Both of the tables show that maximum teachers at graduate and post graduate level responded with positive feedback. They believe that a teacher's motivation is really needed and helpful for students to analyze their errors themselves.

Question No. 3 Do you believe that students can learn more efficiently if their academic writing blunders are not displayed to other students?
Analysis

This question is also included in the affective domain. It can be seen that it's about the students' effective learning if no one displays and shows their academic writing's blunders in front of their other fellows. 80 percent of the teachers strongly agree and 15 percent teachers agree with the stance and question of the researcher. Whereas, 0.00 % percent of the teachers strongly disagree and 5.00 % disagree with this question, they are of the view that it is not bad to show the academic writing blunders of the students to their fellows. They believe that it can be corrected and error free if their blunders are shown in front of all the students. In table No. 2, it has been given that the mean value of graduate level is 4.67, which is more significant. Whereas, the mean value of post graduate level is 4.90 which is most significant and it is better than the graduate level. The S.D value for graduate level is 0.58, and 0.32 for post graduate level. The overall percentage of the responses of the teachers show that they're in favor of showing the academic writing's blunders of the students in front of their other fellows, so they all may correct themselves.

Question No. 4 Do you believe that immediately reporting faults can have a detrimental impact on a student's performance?
Analysis

In the questionnaire, Question No. 4 is also related to the affective domain. The researcher asks from the teacher's belief about the immediate reporting faults, which may have detrimental effects on students' performance. The teachers responded to it according to their own stance. It has been observed that 50 % teachers strongly agree and 30 percent of the teachers agree with the question asked by the researcher. There are also other teachers who don't agree with the question, the table shows that 5 % teachers strongly disagree and 10 % of the teachers disagree with the question asked by the researcher. It can also be seen in table No.2 that the mean value of graduate level is 4.33 and postgraduate level's mean value is 3.90. The S.D value for graduate level is 0.58, and 1.37 for post graduate level. This table shows that it's a most significant value in both of the levels. Majority of the teachers respond that immediate reporting faults may have a detailed impact on a student's performance.

Question No. 5 Do you believe that talks with professors can aid in the reduction of academic writing errors?
Analysis

This question is related to the domain of knowledge and understanding. It has been shown in the questionnaire that the researcher asks that talks with professors can aid in the reduction of academic writing errors. Different teachers have their own stance and point of view for this given question. 50 % percent teachers strongly agree and 25 % of the teachers agree with the statement of this question. It means that teachers have the view that teachers are a primary and necessary source in the reduction of their students' academic errors. Whereas, 10 %

teachers disagree and 15 % of the teachers are neutral for this statement. They have a view that professors are not an important source to reduce the errors in their students' academic writing. It can be seen in Table No. 2 that the mean value of graduate level is 4.67, which is more significant, whereas, the mean value for post graduate level is 3.90. The S.D value for graduate level is 0.58, and 1.10 for post graduate level. Table 1, and 2 shows that the majority of the teachers are of the view that professors can be an aid to reduce the errors in academic writing. It means that teacher' and student' interaction and socialization have an important and pivotal role in reduction of academic writing's errors committed by the students.

Question No. 6 Do you think a teacher's knowledge is sufficient to rectify students' mistakes?

Analysis

This question is again from the domain of knowledge and understanding. The researcher asks that a teacher's knowledge is sufficient to rectify the students' mistakes. By following this question from the questionnaire, teachers give their response. 50% of the teachers strongly agree and 25% of the teachers agree with the statement of the question given by the researcher. They accept the point of view of the researcher that teacher' knowledge is sufficient to rectify the mistakes and errors of their students. Whereas, there are other teachers, they have their different point of view and opinion for this statement. In table No. 1, it has been seen that 5.00% teachers disagree and 20 percent of them are neutral in their opinion. But the overall percentage of the teachers show that maximum teachers are in favor of the question' statement, only 25% of the teachers do not agree with this question statement. In table 2, it has been shown that the mean value for graduate level is 4.67, whereas, the mean value of post graduate level is 4.00. The S.D value for graduate level is 0.58, and 0.94 for post graduate level. These values and percentage shown in table No.1 explain that most of the teachers agree with the question statement asked by the researcher.

Question No. 7 Do you agree that academic books are sufficient for error correction up to a certain point?

Analysis

This question from the questionnaire is also from the domain of knowledge and understanding. The teachers are asked whether academic books are sufficient for error correction of graduate and postgraduate students, or not. It is commonly accepted that books are a necessary and fundamental part of student' learning. The teachers have their own stance and point of view for this statement of the question. It can be seen in table 1 that 50 % teachers strongly agree, and 25 % of the teachers agree with the statement of the question which has been already mentioned above. They believe that books are enough sources to correct the errors of the learners. There are also other teachers who don't agree with this stance, see table No.1. It can be seen in the table that 15 % teachers disagree and 10% of the teachers are neutral for this statement asked by the researcher in the questionnaire. They are of the view that only books are not sufficient to correct the errors, there are much more things that are needed for this purpose. The table 2 shows that mean values of graduate and postgraduate levels are 4.00 and 4.20. The S.D value for graduate level is 1.00, and 1.03 for post graduate level. The percentage and values of table 2 and 1 show that the maximum teachers are with the question' statement, they agree with the stance of the researcher asked in the questionnaire.

Question No. 8 Do you believe that pupils' own efforts can aid in the correction of errors?

Analysis

This question of the questionnaire belongs to the behavioral domain. This question is basically about the habit and behaviors of the students to correct their errors by themselves in their learning process. The teachers have their different point of views for this statement, which can be seen in Table 1. It has been shown that 50% of the teachers strongly agree and 20 % of teachers agree with the statement. They accept that students' own efforts can be helpful in correcting the errors. Whereas, there are other teachers who have their own stance for this question, which has been shown in table 1. It has been shown in table 1 that 5.00% teachers disagree and 25% of the teachers are neutral on this question. But the overall percentage shows that maximum teachers agree with the question statement, they accept that pupils' own conscious efforts can help in the corrections of their errors. It also can be seen in table 2 that the mean value of graduate level and postgraduate levels are 4.67 and 4.20, which indicate that maximum respondents accept this statement. The S.D value for graduate level is 0.58, and 0.92 for post graduate level.

Question No. 9 Do you believe that errors can also be avoided by using internet sources?

Analysis

The question lies in the behavioral domain. It is about the behavior and habits of the students. The researcher put a question that errors can also be avoided by using the sources of internet, or not, this is a question asked by the researcher to the respondents. It can be seen in table 1 that teachers have their own stance for this asked question. The table 1 shows that 55% teachers strongly agree, and 25% of the teachers agree with the statement given in the questionnaire. Whereas, 10 % disagree and 10 % of the teachers are neutral in their answer. But the

table describes that most of the teachers are in favor that errors can be avoided or minimized by using different sources on the internet. It can be seen in table 2 that the mean value of graduate level is 0.58 and postgraduate level's mean value is 1.10. Whereas, the S.D value for graduate level is 0.58, and 1.10 for post graduate level. It is most significant. Both tables show that by using internet sources, the errors of the students can be avoided.

Question No.10 Do you agree that students' mistakes can be reduced by visiting libraries and studying sample projects?

Analysis

This last question is included in the behavioral domain. The researcher asks whether students' mistakes might be reduced by visiting libraries and studying sample projects, or not. This question is related to the habits and behaviors of the students. Table 1 shows that 50 % teachers strongly agree and 20% of the teachers agree that students' mistakes and errors can be minimized by visiting libraries and consulting sample projects to make their background knowledge and contextual brainstorming for correction of their mistakes. Whereas, it also has been shown in table 1 that 5.00% teachers strongly disagree, 10 % disagree and 15 % of the teachers are neutral for this statement. But, the overall percentage shows that most of the teachers' feedback is the same as the question asked by the researcher. In table 2, it has been depicted that the mean value of post graduate level is 4.10 and graduate level is 4.00. The S.D value for graduate level is 1.00, and 1.37 for post graduate level. The values show that it is more significant for students to go for libraries and consult sample projects to reduce their mistakes.

Conclusion

The results of the study describe that Toy's theory is the new approach of error correction and the teachers teaching at graduate and post-graduate level are very much intended towards adoption of this approach. This approach tended to change in the learning styles as the errors would not be considered as the fault and failure of the students and they would be encouraged to come over on the obstacles of language learning.

As there are three main aspects of Toy theory, these aspects can be manipulated in terms of main reinforcement in the shape of emotional change, cognitive change and behavioral change as well. Teachers, teaching at postgraduate level are much intended that the soft and cognitive changes would be inserted in the minds of the students. The significance level of teachers, teaching at postgraduate level is higher than the teachers teaching at graduate level.

Recommendations

- Error could not be told as "failure" to the students so that the motivational level of the students would not be lost.
- Encouragement and motivation can also minimize the errors of the students.
- Writing can be effective if the errors would be highlighted and possibly corrected by the teachers or other ways but in motivational perspectives.
- Immediate and open error telling in the class can reduce the confidence level of the students so it would be avoided by the teachers.
- Discussion methods would be adopted by the teachers and teachers would involve themselves in the discussion regarding error correction of the language.
- A teacher would not consider himself/herself as the final stage of knowledge yet the contrastive view would also be discussed and encouraged in the class regarding error correction.
- Academic books and new technology would also be recommended by the teacher to reduce the errors and checking of errors primarily by the students.
- The Internet can be a great source of error correction so the students' own efforts would be recommended by the teachers to correct their errors themselves before submitting to teachers.
- Documentaries, tours, talk shows, movies, digital dictionaries, encyclopedias, pronunciation sites, libraries and models would be recommended by the teachers to students so that they could make changes in their learning behavior as well.
- Open discussion and open writing would be encouraged by the teachers for the purpose of students' involvement to reduce their correction of language.
- Teachers teaching at graduate level would also be more concerned as the post-graduate teachers are more concerned in the mentioned type of learning changes in students regarding error correction.

REFERENCES

Altamimi, et, al. (2018). A Review of Spelling Errors in Arabic and Non-Arabic Contexts,

- English Language Teaching*, 11(10), 88-94.
- Amara, N. (2015). Errors Correction in Foreign Language Teaching, *The Online Journal of New Horizons in Education*, 5(3), 58-68.
- Hauser, E. (2013). Stability and change in one adult's second language English negation, *Language Learning*, 63(3), 463-498.
- Kahlaoui, N. (2018). Interlanguage Errors Awareness in English as a Foreign Language and Arabic as a First Language in a Saudi Context, *International Journal of Academic Research in Business and Social Sciences*, 8(5), 255–265.
- Raja, et, al. (2016). Error Treatment in Teaching English to EFL Adult Learners: A Study in Current English Language Teaching Practices in Native/Non-Native Divide Context in Saudi Arabia, *Journal of Applied Linguistics and Language Research*, 3(5), 1-16.
- Shalan, K, et al. (2010). *An Approach for Analyzing and Correcting Spelling Errors for Non-native Arabic learners*, The 7th International Conference on Informatics and Systems (INFOS 2010) - 28-30 March 2010 Natural Language Processing and Knowledge Mining Track. Retrieved on May 26, 2022, Retrieved from https://www.researchgate.net/publication/224136817_An_approach_for_analyzing_and_correcting_spelling_errors_for_non-native_Arabic_learners/link/0912f50a4e65b7af0a000000/download.
- Toy, T. (n.d). as cited in Tinker Toys: An Analysis of Instructor's and College Students' Perceptions of Learning by Evan, C., & Byrd, R. (2003), *International Journal of Scholarly Academic Intellectual Diversity*, 5(1), 1-6.
- Wachs, S. (1993). *Breaking the writing barrier: Approaches to the composition class*. In Wadden (Ed.), *A Handbook for Teaching English at Japanese Colleges and Universities*. Oxford: Oxford University Press